8.2 Express the program

\((x:=1. \; x:=x+y) \parallel (y:=2. \; y:=x+y)\)

without using any programming notations (no assignment, no dependent composition, no independent composition), where \(t\) is time, and \(x\) and \(y\) are

(a) boundary variables and assignment takes time \(0\).
\[
\begin{align*}
x' &= y+1 \land y' = x+2 \land t'=t
\end{align*}
\]

(b) interactive variables and assignment takes time \(1\).
\[
\begin{align*}
x(t+1)=1 \land x(t+2)=3 \land y(t+1)=2 \land y(t+2)=3 \land t'=t+2
\end{align*}
\]